Notice of Allowability	Application No.	Applicant(s)	
	10/688,977	UENO ET AL.	
	Examiner	Art Unit	
	Jurie Yun	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *supplemental amendment filed 7/11/06*.

2. ☒ The allowed claim(s) is/are *1-3,5-7,9,11-16 and 18-32*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

The amendment filed 7/6/06 and the supplemental amendment filed 7/11/06 have been entered.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 7/6/06 has been entered.

Allowable Subject Matter

Claims 1-3, 5-7, 9, 11-16, and 18-32 are allowed.

The following is an examiner's statement of reasons for allowance: Prior art fails to disclose a radiological imaging apparatus comprising a radiation detection apparatus including a plurality of radiation detector units arranged in the longitudinal direction of said bed and around said bed, said plurality of detector units being attached to the detector support member in a detachable manner, wherein said radiation detectors comprise a plurality of semiconductor members, detection signal output electrodes and

common potential electrodes, said semiconductor members being arranged in parallel and positioned between said detection signal output electrodes and common potential electrodes, and arranged in a radius direction of the detector support member, as claimed in claim 1. Claims 2, 3, 26, and 30 are allowed due to their dependency on claim 1.

Prior art fails to disclose a radiological imaging apparatus comprising a radiation detection apparatus including a plurality of radiation detector units arranged in the longitudinal direction of said bed and in the circumferential direction of said detector support member, said plurality of detector units being attached to the detector support member in a detachable manner, wherein said radiation detectors comprise a plurality of semiconductor members, detection signal output electrodes and common potential electrodes, said semiconductor members being arranged in parallel and positioned between said detection signal output electrodes and common potential electrodes, and arranged in different positions in the radius direction of the detector support member, as claimed in claim 5. Claims 6, 7, and 31 are allowed due to their dependency on claim 5.

Prior art fails to disclose a radiological imaging apparatus comprising a radiation detection apparatus including a plurality of radiation detector units arranged in the longitudinal direction of said bed and around said bed, said plurality of detector units being attached to the detector support member in a detachable manner, wherein said radiation detectors comprise a plurality of semiconductor members, detection signal output electrodes and common potential electrodes, said semiconductor members being arranged in parallel and positioned between said detection signal output

electrodes and common potential electrodes, and arranged in a radius direction of the detector support member, as claimed in claim 9. Claims 11-15 and 32 are allowed due to their dependency on claim 9.

Prior art fails to disclose a radiological imaging apparatus comprising an X-ray source which moves around said bed and radiates X-rays, a radiation detection apparatus including a plurality of radiation detector units arranged in the longitudinal direction of said bed and around said bed, said plurality of detector units being attached to the detector support member in a detachable manner, wherein said radiation detectors comprise a plurality of semiconductor members, detection signal output electrodes and common potential electrodes, said semiconductor members being arranged in parallel and positioned between said detection signal output electrodes and common potential electrodes, and arranged in a radius direction of the detector support member, as claimed in claim 16. Claims 18-23 are allowed due to their dependency on claim 16.

Prior art fails to disclose a radiological imaging apparatus comprising an X-ray source which moves around said bed and radiates X-rays, a radiation detection apparatus including a plurality of radiation detector units arranged in the longitudinal direction of said bed and around said bed, said plurality of detector units being attached to the detector support member in a detachable manner, wherein said radiation detectors comprise three or more semiconductor elements having at least two surfaces and arrange anode electrodes and cathode electrodes alternately between said different semiconductor elements, and a tomographic image creation apparatus which creates

tomographic image information using said position information, said count information and output information of said X-ray signal processing apparatus, as claimed in claim 24.

Prior art fails to disclose a radiological imaging apparatus comprising an X-ray source which moves around said bed and radiates X-rays, a radiation detection apparatus including a plurality of radiation detector units arranged in the longitudinal direction of said bed and around said bed, said plurality of detector units being attached to the detector support member in a detachable manner, wherein said semiconductor radiation detector has a multilayered structure with an even number of semiconductor elements, forms common anode electrodes and cathode electrodes between said adjacent semiconductor elements in said semiconductor radiation detectors and forms common cathode electrodes on both the mutually facing sides of the adjacent semiconductor radiation detectors, and a tomographic image creation apparatus which creates tomographic image information using said position information, said count information and output information of said X-ray signal processing apparatus, as claimed in claim 25.

Prior art fails to disclose a radiological imaging apparatus comprising a radiation detection apparatus including a plurality of radiation detector units arranged in the longitudinal direction of said bed and around said bed, said plurality of detector units being attached to the detector support member in a detachable manner, wherein said radiation detectors comprise at least three semiconductor elements each having at least two surfaces, and detection signal output electrodes and common potential electrodes

are alternately arranged between said different semiconductor elements, and are arranged in a radius direction of the detector support member, and an image creation apparatus for creates images of said examinee using the output signals of said radiation detectors, as claimed in claim 27.

Prior art fails to disclose a radiological imaging apparatus comprising a radiation detection apparatus including a plurality of radiation detector units arranged in the longitudinal direction of said bed and around said bed, said plurality of detector units being attached to the detector support member in a detachable manner, wherein said radiation detectors comprise a plurality of semiconductor members arranged in parallel and detection signal output electrodes and common potential electrodes which are alternately arranged in connection with said detection signal output electrodes and common potential electrodes, and arranged in a radius direction of the detector support member, and an image creation apparatus which creates images of said examinee using the output signals of said radiation detectors, as claimed in claim 28.

Prior art fails to disclose a radiological imaging apparatus comprising an X-ray source which moves around said bed and radiates X-rays, a radiation detection apparatus including a plurality of radiation detector units arranged in the longitudinal direction of said bed and around said bed, said plurality of detector units being attached to the detector support member in a detachable manner, wherein said radiation detectors comprise a plurality of semiconductor members arranged in parallel and detection signal output electrodes and common potential electrodes which are alternately arranged in connection with said semiconductor members positioned

between said detection signal output electrodes and common potential electrodes, and arranged in a radius direction of the detector support member, as claimed in claim 29.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jurie Yun whose telephone number is 571 272-2497. The examiner can normally be reached on Monday-Friday 8:30-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jurie Yun
Examiner
Art Unit 2882

July 14, 2006

EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER